

# THE MEDICAL AND SURGICAL REPORTER.

No. 390.]

PHILADELPHIA, MAY 7, 1864.

[Vol. XI.—No. 19.]

## ORIGINAL DEPARTMENT.

### Communications.

#### DEFECTIVE AND IMPAIRED VISION.

By LAURENCE TURNBULL, M. D.,  
Ophthalmic Surgeon to Howard Hospital, &c.

(Continued from p. 204.)

#### Remarks upon the Operation of Iridectomy for the cure of Glaucoma.

The operation described with so much care by Dr. BOWMAN, differs from artificial pupil in the larger incision of the cornea, and also more iris is to be taken away. GRAEFE says that there is a direct relation between the amount of iris lost and the effect on the disease, but that not so much as a third, or even a fourth, need be excised. He operates with a lance-shaped knife introduced half an line behind the junction of the cornea and sclerotics, and directed so that its point may pass into the anterior chamber exactly at the point of union. To prevent hemorrhage he recommends slight compression for half an hour, or an hour, and to be gradually relaxed.

The general condition of the eye makes the proceeding less easy than establishing a false pupil. The strip of iris is to be excised to the very circumference. The cornea, therefore, must be cut through at the extreme margin or rather through the sclerotic and cornea where the cornea underlies the sclerotic.

As the iris bulges being sometimes in actual contact with the cornea it is apt to be penetrated; indeed, it is sure to be, without great care. With such an accident, the lens, which is almost always thrust forward, will, in all probability be wounded, and bleeding will be apt to obscure the other steps of the operation. We must enter the anterior chamber and take hold of the iris on its anterior face, when, by the evacuation of the aqueous humor, the iris falls forward; if the iris is adherent the case is not a suitable one for the operation.

The instruments required are, a lancet or lancet-shaped knife, a pair of forceps or blunt hook, and a curved pair of scissors. The sharp iris hook of

TYRELL's is so apt to wound the capsul of the lens that it had better not be employed. In cutting off the iris after drawing it out, cut off half the flap and then draw it upward and cut off the other portion. This is ARLT method and allows it to be cut up to the margin of the corneal wound.

In some instances iridectomy has been applied where there was no glaucoma, and to the manifest injury of the patient. I would therefore advise caution and a thorough study of the diagnostic signs so ably given by Dr. BOWMAN, before resorting to an operation, in the modern phrase, in anticipation of the disease as cases of acute inflammation of the sclerotic, implicating to a more or less degree the iris and cornea, and attended with severe neuralgia and impairment of vision resemble glaucoma, but such cases will yield to judicious treatment without any operation.

Other operations have been devised from glaucoma, and I will therefore give an abstract in the author's own words of each of them. The first is the operation of Mr. HANCOCK, an account of which was first published in the *London Lancet*, February 11, 1860. He says:

"I believe that glaucoma, whether acute or chronic, is essentially a disease of the blood and blood-vessels, and that the effusion or infusion, as may be described, is the result of this condition, which, if not arrested, sooner or later, destroys sight."

He observed that, "in acute glaucoma, the eyeball is constricted, and marked by a circular depression at the point corresponding to the ciliary muscle, whilst the vessels round this point are gorged to a great degree. The eyeball is elongated in its antero-posterior diameter, and the cornea lessened in all its diameters, and rendered more conical than natural: whilst, when the patient turns his eyeball sideways, irregular bulging of the sclerotica (staphyloma) is exposed to view."

"All these considerations," he continues, "led me to suspect that the ophthalmoscopic and pathological appearances of the blood-vessels were greatly enhanced by, if not, in some instances, entirely due to, the obstruction of the circulation, caused by the undue and excessive constriction exerted on them by the spasmodic, or extreme contraction of the ciliary muscle, analogous to the spasm so often observed in the

muscular fibres of the urethra, as well as in the sphincter ani muscle in certain affections of those parts."

To obviate the injurious effects of this spasm, he determined to divide the ciliary muscle. He says that the practice has been attended with the best results.

His mode of operating is thus given:—"I introduce a BEEB's cataract knife at the outer and lower margin of the cornea, where it joins the sclerótica. The point of the knife is pushed obliquely backward and downward until the fibres of the sclerótica are divided obliquely for rather more than one-eighth of an inch; by this incision the ciliary muscle is divided, whilst the accumulated fluid flows by the edge of the knife."

The alleged advantages are:—1, It obviates the objections to iridectomy; 2, It relieves pain by the removal of the constriction of the eyeball, and the consequent pressure upon nerves, from the undue contraction of the ciliary muscle; 3, By it the accumulation of fluid is evacuated, and the impediment to the circulation through the blood-vessels being got rid of, they are placed in a favorable condition to recover their normal state; and a probability of a recurrence of the effusion is greatly diminished; 4, By the situation and oblique direction of the incision, a free drainage of the fluid is provided for; 5, The iris is but slightly wounded, and the pupil is preserved of its original size and shape, and in its normal situation; 6, The danger of wounding the lens is avoided.

Mr. HANCOCK is opposed by every other observer when he says that the cornea becomes conical in glaucoma—flattening is one of the most characteristic symptoms.

It is not probable, I think, that such a muscle as the ciliary could contract with sufficient force to groove the hard and stony eyeball of glaucoma; still less likely is it that such spasm could be continuous.

I ought to mention that Mr. HULKE says, he has several times verified by dissection the co-existence of a hard painful glaucomatous state of the eyeball, with advanced atrophy and fatty degeneration of the muscle.

Mr. SOLOMON has devised a method of dividing the ciliary muscle in glaucoma, which he terms "intra-ocular myotomy." It is performed "by entering a BEEB's cataract knife at the corneo-sclerotic union, and then pushing it through the pillars of the iris into the muscle; the flat surface of the blade being opposed on the one side to the sclerotic, and on the other to the rim of the lens." He limits the incision in the muscle to two lines—one-sixth of an inch. "The intra-ocular incision cuts across a bundle of the radial fibres of the

ciliary muscle, branches of the ciliary nerves of the third pair, and perhaps of the fifth."

The anterior chamber is generally penetrated, and the posterior put in communication with the wound. By this operation, "the circulation in the choroid is regulated, and the stony hardness of the eyeball in glaucoma, and the extreme tension in cases of acute choroid-iritis, sub-acute syphilitic iritis, with recent pupillary occlusion, hydrophthalmia, with the ciliary neurosis which attends these disorders, are either cured or much relieved."

He has performed the operation successfully in cases of acute and chronic glaucoma, choroiditis, conical cornea, myopia, presbyopia, asthenopia, &c., &c. "*Medical Times and Gazette*," May 19th, 1861.

I conclude this chapter with Mr. NUNNELL's operation. His papers are contained in the "*Lancet*" for January 19th and 26th, 1861.

He believes, from the report and from experience, that cures more or less complete have followed the performance of iridectomy, but considers the reasoning by which such results are attempted to be explained, as unsatisfactory. "When it was first proclaimed that the removal of a large portion—the more the better—of what had hitherto been supposed to be an important, nay, essential tissue for satisfactory vision, and the injury of which in a much less degree would, in the great majority of cases, render a sound eye useless, would be found to be a perfect cure for an eye already almost hopelessly diseased, it appeared so astounding that, like many others, I waited before doing it until the reports of some of those who had more faith than I had, gave the result as so uniformly successful, that doubt gave way before recorded facts, and though unconvinced by the reasoning, longer resistance to them appeared like obstinacy."

He thinks that "all that iridectomy accomplishes in the cure of acute glaucoma and glaucomatous diseases is in the greater degree and more permanent manner in which it affords relief to intra-ocular pressure than paracentesis, as performed previous to its introduction, did." The removal of the iris he considers as an evil to be avoided; "The good accompanying its removal does not, in my judgment, result from the iris itself, but from allowing a greater yielding of the eyeball—in all probability owing to a greater division of its curve being made when a large portion of the iris is taken away, than when none of it is removed—and thus permanently lessening its tension, as well as affording a longer continued drain of the aqueous humor." If this be the case, it is desirable to operate effectually for the relief

of tension without injuring the iris, as he demurs to the idea that removal of part of this muscle diminishes the secretion of the aqueous humor. He continues,—"Observing that the eyeball is often distended to the utmost limit which the comparatively unyielding sclerotica and cornea will allow, and that the pain and acutely distressing symptoms in the ball and about the orbit commonly occur in proportion to the rapidity with which the distension takes place, whether the disease be glaucoma, iritis, or choroido-iritis,—and knowing that the most unyielding portion of the globe is the point of junction of the sclerotic, cornea, iris and ciliary muscle, which may not unfrequently, in very decided cases of hydrophthalmia, be observed as a depressed ring between the bulging sclerotic and cornea,—it occurred to me that division of this part would afford the desired relief, and that not improbably the good gained in Von Graefe's operation in reality depends upon the removal of the resistance of this part, and not upon the ablation of the iris."

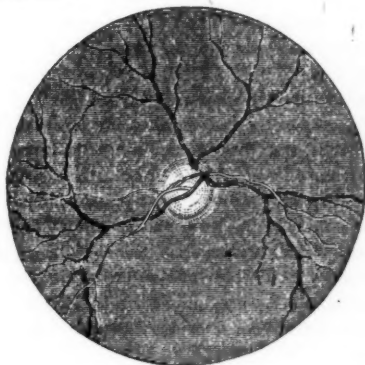
The operation which, in accordance with these views, he devised, he describes as follows:—

The manner in which I have operated is to puncture the sclerotic coat with the point of a sharp thin knife—a small cataract knife, or very narrow, short bistoury answers very well—not less than one-eighth of an inch behind its junction with the cornea, and carry it on to about the same extent through the cornea, making altogether an incision about one-third of an inch long. Care must be taken to pass the knife sufficiently deep to completely divide those textures, and yet not so deep as to touch the lens, which I once did, owing to the patient starting at the moment the incision was made. Care also must be taken not to make the incision too long. A larger incision in the sclerotic, besides unnecessarily wounding important tissues, is useless, and if carried too far towards the centre of the cornea, though allowing this afterwards to yield more, is bad, for it may allow the lens to be displaced into the aqueous chamber; and if the iris should adhere to the whole extent of the corneal section, as it is likely to do, particularly if a portion of its whole breadth has been removed, not only will there be dragging of it, but the section becomes opaque, and hence the field of vision is lessened. In making the section, if the point of the knife has been well kept in, the outer margin of the iris will be divided. Sometimes the iris bulges through the section. I have tried the effect of simply leaving the prolapsed iris in the wound, of cutting it off, and also of pulling out a larger portion, and cutting off a strip through the entire width. In this latter plan the operation more nearly assimilates

with Von Graefe's iridectomy, only that the section through the yielding tissues is made directly across their junction, instead of into or parallel with it, whereby a greater expansion in it is allowed, and not nearly so much of the iris is removed. If none of the iris be cut off or tied, the pupil usually recovers its circular form; if some be excised, it remains oval and attached to the corneal cicatrix, in proportion to the size of the piece removed, but in a much less degree than would be *a priori* anticipated. The degree of deformity is very slight indeed."

As to the situation of the incision, Mr. NUNSELEY prefers "the centre of the lower corneal curvature" as most generally convenient.

At the time of writing, he had performed the operation in about twenty cases, and prefers it to that of VON GRAEFE. The wood cut given in this number should have been in number for April 2d, page 203, it shows the excavation of the optic nerve-entrance in the ophthalmoscopic appearance of Glaucoma.



CEREBRO-SPINAL MENINGITIS.

By E. GREENE, M. D.,

Of Bellefonte, Pa.

In company with Dr. HOLLOWAY, of Nittany Hall, I was called to Mr. Dobbins McKean's, of Nittany Valley, Centre Co., Pa., to see his son aged about twelve years, who was attacked on the morning of the third of February, with severe pain in one knee; which, after a short time was transferred to the brain, the anterior portion of the cerebrum extending across from one temple to the other, accompanied by vomiting, spasmodic contraction of the muscles, with violent convulsions. The head was rigidly drawn back, pupils much dilated, and he lay apparently insensible; but when aroused to consciousness, complained of pain in the head and back of the neck. He also complained of soreness in the epigastric region. The pulse was quick but not tense, and offered

but little resistance to pressure. The bowels were constipated and only moved under the operation of cathartics. The tongue was covered with a white fur, which turned yellow and brown as the disease advanced. He had no power of the left side, but kept the right hand and foot in almost constant motion. The spots, but few in number and confined to the arms and hands, made their appearance on the second day, and were of a dark purple color and varied in size from small red points to half an inch or more in diameter.

*Treatment.* After a free operation of the bowels, by a small dose of calomel, followed a few hours after with castor oil and a blister to the back of the neck, he was kept mainly on the supporting plan, namely: tonics, stimulants, beef tea, etc. But he rapidly grew worse and died comatose in thirty-six hours from the first access of disease.

*Case 2d.* In the same family a little daughter. Dr. HOLLOWAY and I saw her on the 6th day of February, and found her suffering with severe pain in the head, countenance pale, brow knit, pupils dilated, pulse small and frequent, skin dry and not much above the natural temperature, bowels constipated, thirst excessive, nausea and vomiting very troublesome; a fine rash is now plainly visible on the arms, color a bright red. Ordered viij. grs. calomel and a mustard foot-bath. 9 A. M. Patient much worse. She is now almost speechless, very drowsy and pulse scarcely perceptible, heat in the head rather more than natural, cheeks pale and cool.

We now took from a free orifice in the arm about four ounces of thick, dark blood; under this the pulse rose considerably and became less frequent. After waiting an hour we applied cups to the back of the neck, taking about two ounces more blood. A blister was then ordered to the epigastrium, after which the bowels moved freely and the patient was much better.

February 7th. Pulse 130, nausea and occasional vomiting, great thirst, urine voided very frequently, skin cool, tongue coated dark brown, pupils dilated, but not so much as on previous day. She frequently falls into a sound sleep which lasts from ten minutes to half an hour, waking up delirious and restless. She was now ordered the following:

R. Ant. et potassa tart.	gr. $\frac{1}{2}$
Tinct. verat. vir.	gtt. xij.
Spt. æther. nit.	f3ij.
Aquæ	f3xii. M.

A teaspoonful every two hours.

February 8th. The brain much relieved, no more irritability of bladder, very little delirium, tongue better, head drawn back, left eye highly injected with blood. The spots are now full size,

and vary from a pin-head to half an inch in diameter; a large proportion being the size of a split-pea and of a dark purple color, and were on a level with the sound skin. There was no part exempt from these, except the abdomen. Veratria and nitre continued with the thirtieth of a grain of sulph. morphia every three hours.

February 9. Return of pain in the head, vision of the left eye lost, three cups were applied to the back of the neck, and drew about one ounce and a half of blood.

February 10th. Spots beginning to fade, head drawn back more than on previous day; pulse 114.

February 11th. Complaints of pain all over, but more especially in the shoulders and knees. To-day diarrhoea set in and was quite threatening, head cool and no delirium. Treatment continued with the addition of one twelfth of a grain of morphia, to be given every time the bowels move. This in a measure controlled the diarrhoea.

February 12th. Muscles of the neck not so rigid, more use of right arm, which was paralyzed.

Ordered

R. Camphoræ	ʒij.
Alcohol	gtt. xx.
Pulv. Opii.	gr. vi.
Aquæ	f3ij. M.

Dose a teaspoonful every four hours. This was continued more than a week with a steady improvement in all respects except the paralysis which was almost complete in both arms. After convalescence was sufficiently established, we exchanged the camphor and opium for strychnia; under this she gradually regained the use of her arms and went on improving with no unpleasant symptoms, except neuralgia, which returned at intervals with great severity, affecting mostly the head and upper extremities, this, however, passed off in a few days, the sight of the left eye returned and she is to day (April 14) in the enjoyment of health more than ordinarily good.

*Remarks.* In treating the above case, we acted from a belief that the congestion of the brain was the most serious part of the disease, and that early and prompt means should be adopted for its removal regardless of the very great prostration which we think was deceptive.

The blood abstracted, though small in quantity, was taken in the shortest possible time. In this way there was nothing added to the nervous irritability, and nothing permanently to the general debility; on the contrary, the patient seemed to revive rather than sink.

Prof. Wormly, of Columbus, is about to publish his work on the micro-chemistry of poisons. It will be accompanied with handsome plates.



## CASE OF A DOUBLE-HEADED MONSTER

which occurred in the practice of

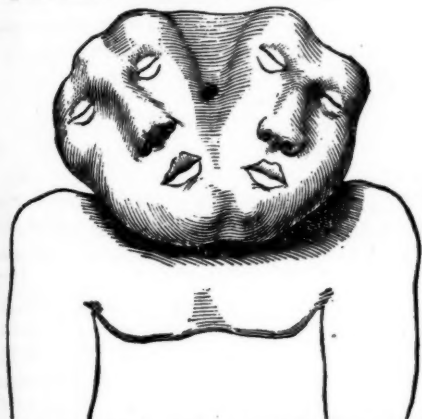
DR. H. N. SHULTZ,

of Sabillerville, Frederick Co., Md.

Reported by DR. D. GILBERT,

of this city, to whom the principal facts of the case were communicated.

Mrs. MATILDA STEM aged twenty-one years, residing near Sabillerville, was taken in labor, at the end of the seventh month of gestation on the 19th of January, 1864. The pains continued at intervals until the 23rd, when after the discharge of the liquor amnii, three violent expulsive pain terminated the labor. The head presented and passed through the pelvis without difficulty. This was her second child, the first having been born about two years previously, and was well formed and healthy. The monster now born showed signs of life on the right side, but expired a few minutes after it was born.



The accompanying wood cut, made after a rough pencil sketch, illustrates very well the general appearance of this double-headed fetus. In this case there evidently was fusion at an early stage of embryonic existence of nearly the entire area of the germinal lamina of the germinal membrane. The right side of one, and the left side of the other became merged so that there was one body, two arms, two legs, as in an ordinarily well-formed child. The fusion of the head and spinal column only were imperfect in their union there being two faces, two ears, and a third meatus auditorius common to both. The upper cranial bones were wanting, and hence this belonged to the acephalus variety of monsters. The scalps were without hair, and there was no opening or any evidence of solution of continuity. The mother made a good recovery and is now in good health.

Dr. WINSHIP daily raises 2,600 pounds, and intends to increase his burdens to 3,000.

## Hospital Reports.

NEW YORK MEDICAL COLLEGE.

CASES IN PROF. JACOBI'S CLINIC FOR DISEASES OF CHILDREN, WITH REMARKS.

Reported by C. C. Terry, M. D.

## 1.—Craniotabes.

E. H., *æt.* 2 months 10 days. Mother hydremic; an older child has spondylitis and hyphosis of the upper dorsal vertebræ. This child has been fed on breast milk, alone.

Head normal size, right side a little flattened, and white, waxy-looking scalp, with very little hair, especially on the occiput. Parietal tubera rather full; flat occiput on the right side, and several soft spots along the lambdoid suture, very flexible, and feeling to the touch like paper. Ten days ago, the child had convulsions.

Craniotabes is rachitis of the bones of the cranium, and consists essentially in absorption of the denser constituents of the bone, leaving it thin and flexible.

Rachitis is a disease of childhood; craniotabes eminently so. A few cases, part of which are doubtful, have been reported immediately after birth; but the symptoms usually show themselves at the age of a few months.

GUERIN found, in three hundred and forty-six cases of rachitis, only three immediately after birth, while more than half occurred in the second year.

Out of 1,654 cases observed by KUTTNER, eighteen were under six months, and forty-nine were over six years; but more than half the cases occurred before two and a half years. From the large number of observations which have been noted, it would appear that the largest proportion of cases occur in the second year after teething has fairly commenced.

The first few weeks seem almost entirely exempt, although cases of very early and even fetal rachitis have been reported. Under a year and a half the male, and after that time the female, sex seems so preponderate.

The general chemical character of rachitical bones consists in too small a proportion of the earthy salts, the new-formed parts showing the greatest amount of deviation, while the old tissue remains in that respect nearly normal until absorbed.

The proportion of carbonic acid is increased, while the amount of fat is little altered, excepting in the long bones, in consequence of the medullary substance being formed both in the cancellar portions of the bone and in the dilated medullary canal.

The specific gravity is diminished in proportion to the intensity of the process; and although the organic basis of the bone has undergone no essential change, the non-ossified cartilage has increased its proportion of water. This increase of water is the principal chemical deviation.

Thus, FRIEDLEREN found in the healthy parietal bone of a child of six months, 21,058 per cent. of water, while in a rachitical bone of the same age the proportion of water was as high as 53,574 per cent., and in the same bone of a rachitical child of eight months he found as much as 81,931 per cent. of water.

The large increase of water causes a kind of serous mollification, which of itself may prevent the cartilage from assimilating as much of the earthy constituents as under normal circumstances.

Several causes of rachitis have been alleged; but altered conditions of the food, especially lack of proteinates, disorders of the digestive organs at a period when the body requires a large quantity of appropriate nutrition, and diseases of the respira-

tory apparatus, especially chronic pneumonia, are the chief causes; and every day's experience shows the intimate connection between rachitis, which is very common among the poor, and the absence of proteinous substances from the food, whether breast milk or artificial.

In proportion as the bone is softened and expanded by the rachitical process, pressure from any circumstance becomes a cause of absorption; hence comparatively thin rachitical bones, which enclose a cavity, as the antrum of Highmore, or cranium, are much exposed to absorption by pressure.

The bones of the cranium, especially the parietal and occipital, are subject not only to the pressure of the brain from within, but also from the pillow or other substance upon which the child lies from without; and it is here we find that softened, thin, flexible condition of the bone which we call *craniotabes*.

The consideration of *craniotabes* is of importance not only as a mere disease of the bone, but also in connection with a frightful disease of childhood, namely, *laryngismus stridulus*.

*Craniotabes* is frequently connected with meningitic processes, effusion between the meninges, or into the substance of the brain, or its ventricles; hence its intimate connection with cerebral disturbances, and the so-called nervous diseases. With *laryngismus* its connection is intimate.

Authors have collected numerous post mortems and cases proving this immediate connection of the *craniotabes* process with the development of *laryngismus*, although it is true that not every case of *laryngismus* is necessarily the result of *craniotabes*.

The ordinary antirachitical treatment was adopted in this case. The child took, for some time, cod liver oil, half a teaspoonful three times a day, with syrup of the iodide of iron, eight drops. Beef tea and other nourishment with breast milk, was also given, and after about four months the child perfectly recovered.

(NOTE.—These cases are presented, with the permission of Prof. JACOBI, not in the order of their occurrence, but as they were deemed of interest to the profession. C. C. T.)

### UNIVERSITY HOSPITAL, NEW ORLEANS, LA. }

P. S. Cooner, Assistant Surgeon, U. S. A., in charge.

#### CLINICAL REPORTS, by HERMANN BAUER, Medical Cadet, U. S. A.

##### Flesh Wounds.

M. L., a private of Morgan's Cavalry, was admitted September the 21st, 1863. He had tried this date to enter our lines as a deserter or spy, and was wounded by a musket ball in the left thigh, by one of our pickets. Being sent under guard to our military authorities, he tried to escape, and was then wounded with the bayonet through his right hand and side. When he came under our care, his hand and thigh bled but little. His wounds were at once attended to. The bayonet had entered his right hand at the palmar surface, between the third and fourth metacarpi, penetrating obliquely, and came out at the dorsal surface, between the second and third metacarpi. This wound being thoroughly cleaned, no hemorrhage showed itself. There was some œdema, but almost no pain. The bleeding did not seem to have come from the palmar arch, since the patient's pulse, though more than normal, was not feeble. The wound had clean out-edges, and contained no foreign matters. In the side, the bayonet had entered between the third and fourth ribs, two inches from the median line of the sternum, coming out at the axillary cavity. There was some œdema,

also, but almost no hemorrhage had followed this injury. The thigh exhibited a mere flesh wound, at about the origin of the vastus externus muscle; between the aperture of entrance and exit, a small bridge of skin without areolar tissue was left. The patient being of very robust constitution, was but little affected. The wounds caused by the bayonet, healed by adhesive inflammation; that caused by the bullet, by granulations, which, after the removal of the bridge of skin, rose abundantly from the bottom of the cavity. He was discharged from the hospital November the 26th, 1863. At this date his hand was as strong as ever before.

##### A Case of Resection of the Humerus.

J. S., æt. 26, of very robust constitution, a private, company H, 4th Wisconsin, was admitted May 30th, 1863.

He was wounded through his left arm; the ball struck the anatomical neck of the humerus, thereby breaking off the head of the bone. Resection of the upper third of the humerus was resorted to. The result of the operation was very gratifying. The patient has now, Feb'y 1, 1864, considerable use of the hand and forearm, with a little motion at the shoulder. The limb promises to become more useful in the course of time.

##### Gunshot Wound of the Face.

E. R., private, company F, 69th Indiana, was wounded at Carrion Crow Bayou, the 3d of November, 1863. The ball had entered near the internal angle of the left eye, and came out at the right temporal region.

He was admitted November the 9th. His face was very much inflamed, having a tendency to erysipelas. The left eye, being uninjured, was entirely closed by effusion into the surrounding tissues. The right eye was lost. The only treatment resorted to, was the supportive, as there was scarcely a chance for recovery. Patient died on the 22d of November, 1863.

*Post Mortem*.—The projectile entered at the junction of the frontal with the left lacrymal bone, tore away entirely the latter, encountering the following parts in its progress:—the nasal process of the left superior maxilla, the two nasal bones, opening the frontal sinus, the perpendicular plate and the right half of the ethmoid, the vomer, opening the right sphenoidal sinus, the right superior and middle turbinated bones, the nasal process and orbital surface of the right superior maxilla, the right lacrymal bone, opening the right antrum of Highmore, the frontal process of the right malar bone, then making its exit at the right temporal.

##### Compound Comminuted Fracture of Left Tibia. Exsection of Snait.

H. G., æt. 24, private, company C, 116th New York, was admitted May 30th, 1863, with a wound, received in action, before Port Hudson. The ball had struck his left leg, causing the above fracture. Exsection of four inches of the shaft of the tibia became necessary, and was performed soon after his admission. The leg, after this, improved daily. At the beginning of July, however, diarrhœa set in, yet his leg seemed to be doing well. New bone had been partly produced, which was covered by healthy granulations. The diarrhœa resisted all treatment.

He died August 14th, 1863. The autopsy being made, the large intestines were found very much thickened, the mucous membrane of a greenish color.

The specimen removed, the long bones of the leg, is a beautiful illustration of nature's attempt to reproduce bone, which was thrown off from the ends of the remaining tibia, its remaining periosteum, and from that of the fibula.

### Compound Fracture of Humerus—Laceration of Abdominal Organs.

H. B., æt. 21, of very robust constitution, a private of company A, 77th Illinois, was admitted December the 25th, 1863. At this date, he fell from a street car, the fore-wheels of which passed over his left arm.

When he came under our care, two hours after the accident, he may have lost already a considerable amount of blood, judging from his countenance, his almost imperceptible pulse, and the state of his clothing.

The arm was nearly amputated, only the biceps muscle and brachial artery were uninjured. He complained of severe pain in the abdomen, but did not remember whether the wheel had crossed over his body.

Efforts were made to produce reaction for a surgical examination, but increased the suffering to a considerable degree. His body exhibited, externally, not the least sign of violence; therefore, this peritoneal pain could hardly be accounted for. The depression increased, however, steadily. Patient expired about four hours after the accident.

The autopsy was made. The humerus was fractured transversely, two inches above the elbow-joint. On opening the abdomen, a considerable extravasation was found, composed partly of the administered stimulant. The large omentum was lacerated and displaced. There was extensive peritonitis, the duodenum was nearly torn in two, accounting for the escape of the contents of the bowels. The mesenterium showed diverse contusions; the stomach, on one place, was nearly perforated; on others, largely injected. The left kidney was divided in two equal parts, only adhering by the uninjured renal capsule.

## EDITORIAL DEPARTMENT.

### Reviews and Book Notices.

**Outlines of the Chief Camp Diseases of the United States Armies**, as observed during the present war—a practical contribution to military medicine. By JOSEPH JANVIER WOODWARD, M.D., Assistant Surgeon U. S. A., Member of the Academy of Natural Sciences of Philadelphia, &c., &c. Philadelphia: J. B. LIPPINCOTT & Co., 1863. 8mo. Price —

Much surprise has been expressed abroad, and much regret felt at home, that with so great an army as that of the United States has been during the last three years, so little contribution has been made to the literature of military surgery and medicine; and that from so vast a field, so little has been gathered for present and for future use. The explanation of this seeming neglect is to be found in the fact, that very early in the war it was determined by the medical authorities, at Washington, to discourage the publication, in the journals of the day, of isolated cases, and to publish, in a collected form and with the official sanction, the carefully recorded observations of those whose judgment and accuracy, could be relied on. Whether this was the best course, must be left to the individual judgment of our readers.

The volume before us, though designated by its author as "Outlines," is an octavo of more than 300 pages. It is printed in the best style of the distinguished house which publishes it, and we think it must, be considered as a valuable contribution to our medical literature.

Few appointments of the Surgeon-General of the United States were made with more judgment than were those of the historians of the Medicine and Surgery of the war. Both Dr. WOODWARD and Dr. BRINTON are most favorably known to the profession, and in this city, to which they both belong, their fitness for the task devolving upon them, will be universally acknowledged. We make these personal remarks, because we consider that the volume before us deserves more than a mere passing notice, and if, in the course of a candid review of it, we should be obliged occasionally to differ from its author, we wish it to be understood that we do it in no captious or censorious disposition, but in that spirit of friendly criticism which he invites.

The introductory chapter of the book announces that "At an early period in the history of the present war, a tendency on the part of all the diseases of the troops to assume an adynamic character was observed, both by the military surgeons, upon whom their treatment devolved, and by medical men in all parts of the country, brought in contact with the encampments or hospitals of the army." We think this fact, as announced by Dr. WOODWARD, cannot have escaped the notice of any one engaged in medical practice, whether civil or military, during the last three years. We believe it to be a part of the same epidemic tendency which, under various names at the present time, is creating so much consternation in the public, and so much anxiety in the professional mind. "It is shown," writes Dr. WOODWARD, in the malarial fevers, the remittent form of which assumes a new character, presenting, from its earliest stages, a typhoid tendency—"it is shown in the epidemic measles, in the ordinary bronchial affections, in the diarrhoeas and dysenteries, and in the idiopathic phlegmasiæ, of every character. The practical result of this wide-spread, typhoid tendency, has been not merely an increased proportional mortality in all the diseases thus modified, but it has been found that depressing therapeutic agents of every character, including blood-letting, antimonials, mercurials, and low diet, have been ill borne." Without attempting to trace this modifying influence in detail, Dr. WOODWARD limits the following pages to the consideration of some of the prominent members of the single group of zymotic disease. Adopting the classification given by the British Statistical Congress, zymotic diseases are defined as those "which are either epidemic, endemic, or communicable, induced by some specific body, or by the want, or by the bad quality, of the food." These are subdivided into *miasmatic diseases*, *enthetic diseases*, *dietic diseases*, and *parasitic diseases*, which last class is rejected by our author as not sufficiently constant to be grouped with these grave disorders. These subdivisions are next carefully considered, and first, of *miasmatic diseases*. After giving the etymology of the term miasmatic, from *miasma*, a stain, and that "therefore it should be broadly employed as the designation of any of the unknown atmospheric influences," whether of vegetable or animal origin, Dr. WOODWARD remarks, that, in this country, even among the majority of professional men, the terms *miasma* and *miasmatic diseases* are used in a much narrower signification, being limited to the first of the two categories above indicated. So that, by the miasmatic diseases, the American practitioner understands inter and remittent fevers, and other malarial fevers only. This limited use of these terms among American physicians is referred to the fact, that this is the meaning attached to them by Professor Wood, of this city, who, by his lectures, and his work on the Practice of Medicine, has exercised the largest influence on the American medical mind. Dr. WOODWARD next states that the observations of the present war have shown that the two forms of *miasmata* are found complicating each other in the most

various manners, and for this reason, and the fact that such is the nomenclature recognized by the Statistical Congress of the British Army, in his work the term will be used in the broad sense before indicated, and those intermittent and remittent forms of disease which are generally attributed to the effects of vegetable decomposition, will be spoken of as malarial affections, and their unknown cause will be described as *malaria*.

We cannot avoid expressing our regret that Dr. WOODWARD has thus attempted to subvert a nomenclature so firmly established in our country, and to introduce a change for which, we think, he fails to assign a sufficient reason. There is no doubt that among us, not only with the thousands whose privilege it has been to derive their first impressions of medicine from the honored Professor before named, but with very many of a previous generation, by miasmatic diseases are understood those which are due to marsh exhalations. This, it is true, is what was taught by Dr. WOOD, but at the same time he made no claim to having originated this application of it. He found it in use, and merely adopted the language which dated back to the days of LANCET. It would be no easy matter for the thousands of his pupils, and the tens of thousands of practitioners, to unlearn their old classification, to regard as miasmatic diseases, typhus fever, typhoid fever, small-pox, and scarlet fever. While we are strong advocates for a uniform nomenclature, and wish that all good physicians, like all good Christians, could "speak one language," we cannot accept as a sufficient argument for so great a change as this, the fact that this arrangement comports with that of the statistical reports of the British Army. With all our respect for our trans-Atlantic brethren, we cannot but regard them as but uncertain guides in the mazes of nosology, and especially in the nomenclature of febrile disease. JENNER, TWEEDIE, and MURCHISON, of the present day, are living rebukes to those of their countrymen who so persistently rejected the enlightened classification of LOUIS, in France, and GERHARD, in America.

If a change in our nomenclature were required, we should have preferred that the converse of that of Dr. WOODWARD has been adopted. *Miasma*, it is true, is a *stain*, but its Greek root, *maino*, signifies to *pollute*, a term which we can readily conceive of as applicable to the action of putrefying vegetable matter. *Malaria*, *la malaria*, *the bad air*, might with propriety include miasmatic (paludal) poisons, as well as those which show themselves in the development of small-pox, typhus fever, plague, and other diseases of filth, and of crowds.

As a subdivision of malarial diseases, we might then place miasmatic diseases as specifying those due to paludal exhalations.

Very much such an application of the term *malaria* is made by Dr. F. H. BARKER, the very latest English authority on this subject, who, in a work on *Malaria and Miasmata*, for which the Fothergillian prize was awarded in the year 1859, thus writes: "I shall, on all occasions, use the term *malaria*, not confining myself in its use to any special agent, but taking it in its true broad sense as signifying 'bad air;' that is to say, air, or a gas, or a compound of gases, which, being absorbed by the lungs, gives rise to certain specific effects or symptoms, which, grouped together, constitute a disease."

The second order of zymotic diseases is designated as *enthetic diseases* (from *enthetos*, placed in), i. e., those diseases which are communicated by inoculation, only. These need not detain us, as "none have presented, as yet, any special peculiarities to distinguish them from the same affections in civil life." The third and last order is that of *dietic diseases*, from *diaita*, mode of life (we prefer the genitive,

*dietetic*, as they are diseases of the way of life), under which are classed starvation, scurvy, purpura, delirium tremens, &c.

Chapter 2d is devoted to "the conditions determining the character of camp diseases." Dr. WOODWARD states, "that three wide-spread and powerful influences underlie and determine the character of by far the majority of camp diseases in America: malaria, crowd poisoning, and the scorbutic taint. These three influences, variously combined, will appear continually as determining or modifying conditions, if not always as the causes of all the affections considered in this work." This is a most interesting fact, and is more fully elaborated by our author, as we shall have occasion to notice hereafter. A few highly judicious remarks follow, on the subject of marsh miasmata, or malaria, and without any unnecessary discussion of a subject, which however interesting elsewhere, would be out of place in a practical work like his own, Dr. W. enunciates the following correct proposition: "Although the prudent reasoner may hesitate to affirm the dogma, that vegetable decomposition causes the fevers of this class it is impossible not to admit it to be one of the most important of the determining conditions."

Next in order are considered the mischievous effects of over crowding, the prominent diseases resulting from which are stated to be typhoid fever, typhus, and oriental plague, the latter of which is fortunately unknown in our army. Doubts are expressed by our author whether the few occasional cases returned as typhus fever, were really instances of true typhus; certain is it that this disease, as such, has at no time during the present war prevailed to any extent among our soldiers. Typhoid fever, on the other hand, has been fearfully prevalent; thus the number reported as typhus and typhoid fevers during the year ending June 30, 1863, was 22,801 cases; not cases of pure typhoid fever, but variously complicated with malarial or scorbutic phenomena, or with both. Two or three pages are occupied in illustrating the manner in which these evil effects of crowding such large numbers of men may manifest themselves. We commend to the careful perusal of our readers, pages 49 and 50, which are chiefly occupied with descriptions of the latrines about encampments. This subject is especially interesting at the present time, as bearing upon the question now agitating the medical mind of Great Britain, in reference to the origin and cause of typhoid fever. Not only does Dr. BUDD maintain that typhoid fever is propagated by the exhalations from human excrement, and especially from that of individuals suffering from this disease, but a later writer Dr. MURCHISON, in a most interesting and exhaustive volume on Continued Fever, asserts that this is the chief, if not the only cause of this fever, and gives it a name derived from this supposed origin. Certainly, the interesting statements of Dr. WOODWARD will go far to sustain the views of Drs. BUDD and MURCHISON, and should claim our careful consideration, as they will not fail to receive that of our trans-Atlantic brethren. Certain, too, is it, that this subject of the situation and construction of these latrines should receive the closest attention of the military surgeon.

We must beg leave to differ from our author in his statement that, "in America, the leading practitioners have completely abandoned the idea that typhoid fever is a contagious affection." This is not the case with Dr. FLINT, a high authority on this subject. We happen, too, to know that both the present Professor of Practice of Medicine in the University of Pennsylvania, and his immediate predecessor, hold the opinion that, although their own personal observations would lead them to think differently, yet the testimony of others is so direct and positive on



this point that they are disposed to believe, under certain circumstances, even typhoid fever may become contagious. Our own convictions correspond with those of Dr. WOODWARD, and after an experience of public practice for several years, we have yet to see the first case of typhoid fever which could be referred to contagion.

Section 3d is devoted to the consideration of the scorbutic taint, a subject worthy of the careful attention it has received from our author. It is a happy circumstance, one gratifying alike to the philanthropist and to the man of science, that our statistical table shows "a smaller proportion of recorded scurvy than is exhibited by the records of any great army that ever took the field." Very true, however, is the statement made soon after, that it would be a mistake to suppose that the figures just given represented the whole influence on the army of the unhealthy conditions which, acting in their highest degree, produce scurvy. It is in its modifying influence on diarrhoeas, dysenteries, and other camp diseases, that the scorbutic taint is most extensively manifested. A peculiar form of anemia, severe neuralgic pains in the lumbar region and in the legs and feet, are often manifestations of this taint. This is a condition with which we are very familiar. Time and again have we had placed under our care, after a long and severe winter, cases of this scorbutic character which, regarded as rheumatism, had been saturated with alkalies, of all treatment that most unsuited to their condition. For these pains are not those of rheumatism, but the evidences of an impoverished blood, the cry of the tissues for blood, for good, rich, healthful blood. Dr. WOODWARD has done a service to humanity, in afresh directing attention to this morbid condition, and to its proper treatment. We have not time to follow our author in his judicious remarks on this subject, which commend themselves alike to the civil and to the military surgeon.

Under the title of "Camp Fevers," nearly one-half of the remainder of the volume is occupied. Neither yellow fever nor typhus fever has prevailed to any extent in our army, and Dr. W. passes by these, to arrange the others into three principal groups: *typhoid* fever, with or without scorbutic complications; *malarial remittent* fever, with or without scorbutic complications; and a vast group of mixed cases, in which the malarial and typhoid elements are variously combined with each other and with the scorbutic taint, and for which the author has proposed the name of "typho-malarial fever."

[To be continued.]

## Periscope.

### Properties of Nitro-Benzole and Aniline.

If we may credit the statements of Dr. LETHBY, in the *London Pharmaceutical Journal*, it would almost seem as though the desired "occult poison" of the days of the emperors, which had long since lain in obscurity among the works of the early writers not occasionally brought into light during the fifteenth and sixteenth centuries, which if used skillfully, would ultimately destroy the life of the victim by a lingering illness perplexing to the physician, and eluding the sagacity of the chemist. The fact is more interesting since the substance is an article of commerce and accessible to all. In the two fatal cases; one where the poison was inhaled, and the other where it was swallowed, there was at first no discomfort; "gradually, however, the face became

flushed, the expression stupid, and the gait unsteady—the sufferers had the appearance of persons who had been drinking. Little by little this stupor increased, until it passed into profound coma, and in this condition they died. The progress of each case was much the same as that of slow intoxication, excepting that the mind was perfectly clear until the coming on of the fatal coma. This was sudden, like a fit of apoplexy; and from that moment there was no return of consciousness or of bodily power—the sufferer lay as if in a deep sleep, and died without a struggle. The duration of each case was nearly the same; about four hours elapsed from the time of taking or inhaling the poison to the setting in of the coma, and the coma lasted for about five hours."

"After death there were no appearances of convulsions, but rather of narcotism and apoplexy. The face was flushed; the lips were livid; the superficial vessels of the body, especially about the throat and arms, were gorged blood; the dependent parts were turgid; the blood was everywhere black and fluid; the lungs were somewhat congested; the cavities of the heart were full; the liver was of a purple color, and the gall-bladder distended with bile; the brain and its membranes were turgid, and in the case of the man there was much bloody serosity in the ventricles. Analysis discovered the existence of nitro-benzole in the brain and stomach, and also of aniline."

When administered to an animal, the effects were speedily fatal, and it was "soon seized with giddiness and an inability to walk. The weakness of the limbs first appeared in the hind extremities, and was manifested by a difficulty in standing; but very soon it extended to the fore legs, and then to the head and neck. There was complete loss of voluntary power. The animal lay upon its side, with its head drawn a little back, and with its limbs in constant motion, as if in the act of walking or running. The muscles of the back were occasionally fixed in spasm, and every now and then the animal would have a sort of epileptic fit. It would look distressed, would howl as if in pain, and would struggle violently. After this it would seem exhausted, and would lie powerless. The pupils were widely dilated, the heart's action was tumultuous and irregular, and the breathing was somewhat difficult. For some time, however, the animal retained its consciousness, for it would look up, and wag its tail when spoken to; but suddenly, and often at the close of a fit, it would become comatose—the eye would remain open, but the conjunctiva would be insensible to the touch, and the movements of the limb would nearly cease; the breathing would be slow and somewhat stertorous, and the animal would appear as if it were in a deep sleep. This condition would last until it died—the time of death varying from twenty-five minutes to twelve hours after the administration of the poison."

"When the action of the poison was slower, there was often no visible effect for hours or days. It would go about as usual, would be quite lively in its movements, would eat its food heartily, and in fact would seem to be in no way affected by the poison. Suddenly, however, it would look distressed, it would have an attack of vomiting, and it would tumble over in an epileptic fit. The animal would lie upon its side perfectly helpless, and then the progress of the case was much the same as that already described, except that it was considerably slower. This would last for days, and then there would be either a gradual restoration of voluntary power, with complete recovery, or death from exhaustion: The time that elapsed from the administration of the poison to the coming on of the first symptoms, namely, the epileptic fit, varied from nineteen hours to seventy-two; in most cases it was about two days, and the time of death was from four to nine days."

"Whenever the progress of the case had been quick, and death had taken place within twenty-four hours, there was always unmistakable evidence of the existence of aniline in the organs of the body. In the slower cases the odor of the poison had often entirely disappeared; but generally there were distinct traces of aniline in the brain and urine, and sometimes in the stomach and liver; occasionally, however, no poison was found."

"There seems to be a probable conversion of nitro-benzole into aniline in the living animal body, by a process of reduction, there is also undoubtedly a change of an opposite character going on upon the surface of the body, whereby the salts of aniline are oxidized and converted into *mauve* or *magenta* purple."

"In one case after the narcotic effects of the poison had passed away, he was remarkably blue, like a patient in the last stage of cholera."

Although the alkali aniline is so deleterious, yet large quantities of the sulphate has little action upon the animal body.

#### Cerebro-Spinal Meningitis at Long Branch, N. J.

Dr. SAYRE, the Resident Physician, and Dr. MURPHY, the Health Commissioner of New York, who were requested by his honor, the Mayor, to visit Long Branch, N. J., and examine into the character of the disease there prevailing, made a report to him on the 24th inst. on the subject. These gentlemen state that they arrived at Long Branch on the afternoon of March the 23d, and devoted two nights and a day to the examination of the disease. There have been ninety cases and thirty-seven deaths at Long Branch and its vicinity since the breaking out of the disease. The popular impression that no recoveries have taken place after an attack, is thus seen to be erroneous.

The disease commences with a violent chill, and the first stage lasts about sixteen hours. During this stage many die—the second period is from two to three days, after which convalescence may take place. The most alarming symptom is congestion of the head, and a nervous paralysis which, until removed, renders the administration of remedies ineffective. The technical name of the disease is *cerebro-spinal meningitis*, and the membranes of the brain and spinal marrow are the seat of inflammation.

Two post-mortem examinations were made by Drs. SAYRE and MURPHY, and the facts thus revealed showed that the disease is amenable to treatment. There is nothing peculiar or mysterious; it is neither contagious nor infectious; nor are there any atmospheric conditions which were obvious to cause its existence. There are no swamps or stagnant water in the vicinity from which the presence of malaria might be inferred. On the contrary, the situation is on sandy soil and open to the pure air of the ocean.

The diet of many who have been seized has been bad. Flour made from spoiled grain has been employed as an article of domestic consumption, and a substitute for coffee, made to a considerable extent, from smutted rye, has been used. It is the custom of many families to burn kerosene lamps all night, the wick being put down. This vitiates the air and fills the sleeping apartments with an impure gas. Every case of the disease, and the physicians visited all now sick, could be traced to distinct causes. The depression of the system, by improper food, by breathing foul air, or by fear and moral influences of a dispiriting character. Exposure to cold or fatigue then would bring on the attack.

Dr. SAYRE, in conclusion, said that he intended to embody his observations at length in a report to the Academy of Medicine.

#### Fine Clay as a Dressing to Sores.

Dr. SCHREBER, of Leipsic, recommends the use of clay as the most "energetic, the most innocent, the most simple, and the most economical of palliative applications to surfaces yielding foul and moist discharges." He moreover considers that it has a specific action in accelerating the cure. Clay softened down in water, and freed from all gritty particles, is laid, layer by layer, over the affected part to the thickness of about a line. If it become dry and fall off, fresh layers are applied to the cleansed surface. The irritating secretion is rapidly absorbed by the clay, and the contact of air prevented. The cure thus goes on rapidly. This clay ointment has a decisive action in cases of fetid perspiration of the feet or armpits. A single layer applied in the morning will destroy all odor in the day. It remains a long time supple, and the pieces which fall off in fine powder produce no inconvenience.—*British Med. Jour.* April 11, 1864, p. 381.

[We can quite corroborate Dr. SCHREBER's observations, having used fine clay poultices for several years—chiefly, however, in cases of local inflammation requiring the application of cold. Rags wet in water, or goulard water, so rapidly become dry and hard that the benefit from the told application is completely lost. There is no dirt when the clay is enveloped in a piece of fine linen, and is not too fluid in consistence.—*Braithwaite*.

#### On the Use of Citrate of Ammonia in Cases of Irritable Bladder, with Urine of Low Specific Gravity.

Some of the most troublesome cases of irritation of the bladder that come under the notice of the surgeon, are those dependent upon disease of the kidney; the vesical pain and irritability arising from the altered state of the urinary secretion.

Dr. MEADE, in the *Medical Times*, does not allude to those forms of functional disorder, where different kinds of sand or gravel are secreted; but more especially to those cases in which the urine is of low specific gravity and deficient in urea; the accustomed stimulus of which seems to be missed by the bladder. Among these many cases of Bright's disease may be classed, in which the first symptoms that excite the patient's attention, and are present for weeks or months before other indications of disease are noticed, are pain in micturition, with a too frequent desire to empty the bladder.

As all forms of irritable bladder are very difficult to relieve any remedies found useful are worth recording. After using the *Triticum repens* recommended by Mr. HENRY THOMPSON, his attention was drawn to the citrate of ammonia by the late Dr. PROUT in his treatise on the stomach. Since then he has used it with great benefit and does not hesitate to recommend it as worthy of confidence.

It is readily formed by adding one drachm of the sesqui-carbonate of ammonia with one drachm and fifteen grains of citric acid to six ounces of water. An ounce of this mixture may be taken three or four times daily.

He always prescribes it in cases of irritable bladder, where the urine is of low specific gravity. Too many of these cases occur in connection with serious organic disease of the kidneys, where palliation of the symptoms is all that can be hoped for. Remarkable improvement of the health takes place under a steady use of this remedy for some time, where chronic desquamative nephritis, or even suppurative inflammation of the pelvis of the kidney, had been going on for many months.

## MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, MAY 7, 1864.

## A SUBJECT FOR THE AMERICAN MEDICAL ASSOCIATION TO CONSIDER.

The practice of gratuitous medical services in public institutions, has so long been the habit of the profession, and has come to be so thoroughly interwoven with its operations and spirit, as almost to be regarded as a part of its ethics, and sustained by a sort of *esprit de corps*. It has, in fact, got to be so universal a practice, that the great body of professional men regard an appointment in a hospital, a dispensary, or an infirmary, as a great desideratum, and strive for a chance to do the work for nothing as vigorously as though a handsome salary were attached to the appointment. In this we believe our noble profession stands alone, for what other is there that donates its services to one thousandth the extent of ours?

But a long reflection on the subject, and an extended observation of the manner in which many of our so-called charitable institutions are conducted, has wrought the conviction that the medical profession is grossly imposed upon in this matter. Not only do the physicians and surgeons of many of these institutions give their time, their skill and their labor without pecuniary recompense, but they also deprive their brethren outside of the institutions, as well as themselves, of no inconsiderable amount of income which is rightly theirs.

The amount contributed, in the shape of professional services, to the support of public charities, will be found on examination almost incredible, even when estimated at the very lowest rate of private charges. Several years ago it was estimated, if we remember rightly, to amount annually to about \$2,000,000 for the City of New York, and doubtless a like proportion to the population will be found in this and other cities.

Now we do not intend to propose that the professional staffs of our hospitals, dispensaries, &c., should strike for and demand wages to that or any other amount, as an act of justice to themselves; but it is a very serious question whether the practice alluded to of giving gratuitous service

to all persons whom the lay directors of these institutions choose to admit to their benefits, is not carried to an unjustifiable extent, and in too many instances a wrong done to the profession outside, and a violation of our code of ethics, in spirit at least, if not in the letter. It is generally believed that a considerable portion of the applicants for relief at these theoretically eleemosynary establishments, especially the dispensaries, are able to pay for medical services, and resort to them from miserly motives, concealing their pecuniary ability. In such cases it is admitted that the medical officer is not to blame,—the very fact of this concealment relieving him from responsibility.

But the evil complained of is not confined to those institutions in which this deception is practised, but it is undeniable that many of our largest and best patronized hospitals not only receive, but invite into their wards, and offer all their comforts and advantages including the best medical attendance, to people who are well able to pay for the latter, while all that is required of them is the cost of their board. Institutions of this class are called *Charities*, while in fact they are little else than *hotels for the sick*, the inmates being often well off in this world's goods—well enough off at least to pay reasonable fees for professional services. In support of this statement we refer to the annual report of the New York Hospital for 1862, which is now before us, by which we learn that there were treated in that year, four thousand four hundred and three patients, of whom three thousand four hundred and fifty-two, or more than three-quarters (including nine hundred and ninety-one seamen paid for by the United States Government) were *pay patients*. It is notorious to those familiar with the character of the patients in that institution, that large numbers of them are well-to-do, and were it required of them, would very cheerfully pay an additional sum per week for the excellent professional treatment they receive. Yet all that is required of them is the expenses of their board, washing, &c., professional remuneration being wholly ignored. It has even been known to occur to the professional attendants that they have sometimes found their *private patients* in the beds, having resorted thither from hotels, and

even from their families, to obtain those services which they would otherwise have been obliged to pay for, as they were well able to do,—but which are now required to be rendered gratuitously.

In our judgment one of two things should be demanded of all these *quasi* charities,—either that their privileges be confined to paupers, or the professional attendants be remunerated for the time and services rendered those able to pay; and the voice of the profession at large should be raised against the practice now too frequent, of indiscriminate gratuitous service. The general profession, as well as those who serve, has a clear moral right to the income of which they are thus deprived.

Section 9 of Article 5 of the National Code of Medical Ethics, reads as follows:

*"A wealthy physician should not give advice GRATIS to the affluent, because his doing so is an injury to his professional brethren. The office of a physician can never be supported as an exclusively beneficent one; and it is defrauding, in some degree, the common funds for its support, when fees are dispensed with, which might be justly claimed."*

A large part of the hospital practice alluded to is certainly embraced within this prohibition of the code. The unjust action of the managers regarding compensation to the medical staffs, in the cases of non-pauper patients, is aggravated in the cities of New York, Brooklyn, and doubtless, others, in the cases of the seamen for whose support, while in hospital, the United States Government is responsible, and for the professional services rendered, whom it is not only willing and offers to pay at a fair remunerative rate, but the managers decline to receive it, and compel the service for nothing. The alleged reason for this is the competition between the Brooklyn and the New York City Hospitals, for the patronage of the Government, each striving to get the largest number of seamen who are entitled to the benefits of the Marine Hospital Fund. Thus the medical staffs of these two institutions are deprived of an income, which, were there no such institutions as these hospitals, would be paid directly into their hands from the Government agents.

In other parts of the country where there are no civic hospitals, Government has hospitals of

its own for the reception of this same class, (called Marine Hospitals) and pays fair salaries to the physicians employed in them.

A yet more aggravated instance of this wrong to the profession is the recent gratuitous treatment in one of the largest hospitals, of over two hundred officers and sailors from the Russian frigates in the harbor of New York, sick with syphilis and scurvy, for whose board their government pays liberally, and doubtless would, were it required of them, cheerfully pay an additional sum for the professional service given them. But the managers of this institution are wholly indifferent to the just rights of the profession in bargaining for the care of the men, and the professional gentlemen in attendance consent to this "*defrauding the common funds of fees which might be justly claimed,*" in direct violation of the code of ethics. The same practice has been followed, to a large extent, for officers and men of the French navy, and doubtless of others, all of whose governments as well as our own, may certainly be ranked among the "affluent," to whom "advice gratis" is prohibited, "because doing so is an injury to professional brethren."

As *prima facie* infringements of the very letter of the code, and as violations of both professional law and justice, we call attention to these practices, that the members of our hard-working and poorly-paid profession may take such steps as may be necessary for their correction.

#### "SPOTTED" OR PETECHIAL FEVER.

The peculiar affection popularly termed "spotted fever" which has been so prevalent in different portions of the country the past year has attracted much attention in consequence of the fatality attending it. Too little has been understood concerning its pathology and treatment. Now, however, considerable light has been thrown upon both by means of communications published through our columns.

This malady first appeared in the United States in the town of Medfield in Massachusetts, in 1806. Its ravages were afterwards experienced in Connecticut, in 1810. In 1812 an epidemic occurred among the soldiers of the United States Army, at Greenbush. During the winter and spring of 1813

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it was prevalent and was extremely fatal in the State of Vermont, also in the northern part of the State of New York where it has occurred at intervals of ten or twelve years, and was termed by some, cerebro-spinal meningitis. The disease is briefly described by WATSON and also by WOOD, under this latter title. The statistics show that it chiefly attacks children and young persons, especially boys. An epidemic occurred during the winter and spring (which would seem to be its favorite seasons) of 1857, in the villages of Elmira and Horseheads, and to some extent in other parts of Chemung county, New York.

Although this disease has prevailed since the time of SYDENHAM, in every epidemic owing to its fatality it is always spoken of as a new disease, and yet the symptoms are almost constant and harmonious which are "A chill, headache, vomiting, prostration, morbid sensitiveness of the skin, jactitation, coldness of the surface, wildness of expression, dilated pupils, irregular breathing, paralysed deglutition, wry-neck, retraction of the head, dullness or abolition of the senses, pulse but little affected, bowels quiescent, petechia, delirium, convulsions, coma; these are impressive symptoms, and many or all of them attend each case."\*

It would seem that this fever appeared in New Jersey in 1836, and then crossed the river attacking the inhabitants of Philadelphia, and passing through the State of Pennsylvania. The late Dr. JOSEPH PARRISH gained great credit by avoiding bleeding and depending upon stimulation which has been the most successful treatment in all the epidemics which have occurred. Dr. PARRISH had studied with care Dr. NORTH's† treatise on this disease.

It is somewhat remarkable that in the epidemic of 1864 in Philadelphia the authorities do the same thing which was done by those of London during the plague, two centuries ago,

namely, 1664; for in the mortuary bill of April 4th, this disease is termed spotted fever, malignant typhus, and for the first time, cerebro-spinal meningitis. In the early days of the plague it was put down on the list, as spotted fever, not to alarm the public. The mortality so far in our epidemic, is equal to that of all the others, namely, one half die; and so also of the pathological lesion, the only one found as a constant condition is entire change in the blood, almost a separation of it into its original elements. This epidemic exhibits also the remarkable characteristic of counterfeiting other disorders, and the physician is not unfrequently surprised by the sudden approach of death in instances where the patient was actually about his room, or walking about the day previous, as was the case with a distinguished physician of this city, and also was seen in one of our public institutions for boys, where there were four fatal cases out of some ten or twelve attacked.

The predisposing cause of this fever seems as yet to have eluded investigation. That it is not contagious is universally agreed. The suggestion in a report recently published in regard to ergot (spurred rye) or any other grain as having produced it, is not corroborated by sufficient evidence. The true cause, as in all other epidemics, depends upon a peculiar state of the atmosphere. The exciting causes are eating improper food, stale or diseased meat; the meat of the young calf, pig, or sheep; indeed, a very large amount of meat sold in many of our street markets is entirely unfit for food, exposure to cold or damp, great fatigue, anxiety of mind, fearing the name of the disease sometimes inducing a morbid condition of the mind making the system favorable to its influence. The humane and prudent physician will, therefore, do all in his power to divest the disease of its alarming name, calling it "nervous" fever or cerebro-spinal meningitis, which is considered by some as being more appropriate, as but a small proportion of the cases are marked with petechia.

#### PHYSICIAN'S FEES.

We observe a movement in various sections of the country, looking to an increase in physician's

\* Squire Transactions of Medical Society of State of New York, 1858, p. 133.

† The reader may consult Dr. N. E. NORTH, on Spotted Fever; Communications to the Mass. Med. Soc., Vol. II.; New England Med. Jour.; Amer. Med. and Philosophical Register, and Med. Reps. of New York; Gallup on Epidemics. Sketches by James Mann, M. D., and Treatise on Typhus Syncopatis, by Thomas Miner, M. D., and American Modern Practice, by James Thatcher, 1826.

fees. The College of Physicians of this city, the Connecticut River Valley Medical Association, and other organizations have adopted higher rates of charge. This is perfectly right and proper. The physician's fee was disgracefully low in times of cheap living, and is utterly inadequate at the old rates to meet the present demands.

The medical profession is very poorly compensated for the time, talent, intelligence, labor and energy, with which they devote themselves to their arduous duties. Their remuneration is too small to enable them to avail themselves of the facilities to attain that amount of scientific knowledge which is necessary to an intelligent application of all the means provided in nature or by art for the treatment of disease. There are comparatively few young men who begin the practice of the medical profession who have not sufficient ambition, if they had the means, to pursue their studies and add to their knowledge, and to this end to procure needed books and mechanical appliances so indispensable to enable them to do justice to themselves and to the communities in which they reside. Their remuneration, however, is so inadequate, that they are compelled to be satisfied with the text books and pocket instrument cases with which they left the schools, and to supply themselves with but a meagre stock of remedies. Is it any wonder that they gradually lose their ambition, too often become loungers around places of public resort, and finally settle down into a mere routine practice?

Every one knows the power of money, and the young physician who has it at command, or who is fortunate enough to fall into a "paying practice," is very apt, if he steers clear of an immoral course of life, to become an intelligent practitioner, an honor to his profession, and an ornament to and the pride of the community in which he resides.

There is a pressing necessity, aside from the temporary greatly increased cost of living, that our professional fees should be permanently increased. It is needed, that we may have the means to perfect ourselves in the knowledge necessary to qualify us for a proper discharge of our duties to the community.

#### A Desirable Location for a Surgeon.

We would call the attention of our readers to the very rare opportunity offered in our advertising columns to a surgeon of experience, to obtain an excellent location. It is in a large inland manufacturing city, the capitol of one of our largest States, at the head of navigation on a large river and in the centre of one of the richest agricultural and manufacturing districts in this country.

The property is well located and in excellent condition. The present occupant, a surgeon of distinction and very large practice, having received an important public appointment, retires.

## Correspondence.

### FOREIGN.

#### LETTERS FROM Dr. W. N. COTE.

PARIS, *March 31st*, 1864.

#### Longevity at Vera Cruz.

M. RIONDET, commander of the *Sainte-Barbe* gunboat, lately published certain curious researches, made by him in a library at Vera Cruz, on longevity in those parts. Your readers will be surprised to hear that from the census taken in 1831, the latest on record it would seem, it appeared that, notwithstanding the notorious unhealthiness of the climate of Vera Cruz, there were in that year eleven persons in the district, upwards of 100 years old.

#### Phthisiophobia.

Dr. BINET writes about phthisiophobia, that is, fear of consumption, which he considers to be a disorder by itself. It may be so, no doubt; but would it not perhaps be nearer the truth, to classify it as a mere offshoot of spleen, or melancholy?

#### Deafness.

Dr. TOBERT DE LAMBALLE gives a report on a highly important paper from Dr. PHILLIPPEAN, on deafness. The author describes some new experiments on the perforation of the drum or tympan of the ear. In order to ascertain whether a patient, laboring under deafness, can hope to recover his hearing, or not, Dr. PHILLIPPEAN applies a common watch to his temples, and, if he hears the ticking, his cure may be considered certain.

#### Production of Ozone.

M. SAINT PIERRE lately communicated to the Academy of Sciences a paper on the production of ozone by the mechanical action of apparatuses of ventilation. Ozone, as you know, is, according to most chemists, electrified oxygen, and its test is iodized starch. M. SAINT PIERRE, having placed several strips of paper, coated with this test, into the eduction-pipe of a blowing-machine intended to feed a furnace of an iron foundry, and placed other

strips of the same kind in the adjoining chambers and outside, set the blowing-machine a going, and found that in the course of about ten minutes, the strips exposed to the action of the machine became tinged with violet, which deepened by immersion in water; while the other strips in the open air underwent no change whatever, though exposed for several hours. The weather was fine, there was no tempest brewing, the air in the work-shop was equally free from ozone, and the ventilator was fed with non-ozonized air, taken from both within and without. Hence the only explanation possible of this phenomenon is, that the oxygen of the atmosphere is transformed into ozone by the compression to which the air of the ventilator was subjected. The experiment, repeated in various ways, always led to the same results.

#### Causes of Mortality in London.

The London Registrar-General's Return, for the week ending the month of February, states that an infant was poisoned by a lozenge which contained the forty-eighth part of a grain of morphia. A child died from the scratch of a kitten. While the mortality from phthisis (157 deaths) was considerably less than it had been in previous weeks, that from bronchitis had increased. The latter disease was fatal in 304 cases, pneumonia in 97, heart disease in 90 cases. The present season seems to have developed bronchial affections with unusual effect.

#### Oxygen as a Therapeutic Agent.

Drs. DEMARQUAY and LECONTE publish their observations on the properties of oxygen as a therapeutic agent. If, at the commencement of this century, when it was first studied by physicians, it had been applied to the proper cases, its uses, our authors observe, would not have been so easily abandoned. One of the cases in which oxygen would be decidedly hurtful, is that in the existence of inner sores, or foci of inflammation; oxygen in such cases revives a sensation of pain in the inflamed regions, within a few days. Still, the physician may even derive some advantage from the exciting property of oxygen, in order to change the nature of the inflammation. Oxygen has also a powerful effect on the heart, because it generally renders the circulation more active. Hence, it should not be administered to old men, in whom a disturbed circulation is found to exist. Persons predisposed to hemorrhagia should not breathe oxygen; nor those who are in a febrile state. But as to the cases in which the inhalation of oxygen should be had recourse to, there is scarcely any limit to them; for so long as a man can breathe it, this agent can be administered; while, on the other hand, the power of absorption of the stomach, the organ to which recourse is always had, is limited. Oxygen ought to be inhaled in cases of anemia, chloro-anemia, diphtheria, and, generally, in all those cases in which it is necessary to afford strength to the patient. Under the influence of oxygen, and in a very short time, if age and the general state of health permit it, the patient re-

gains his vigor and appetite, to such an extent that patients have been heard to call for something to eat during the night; the lips soon become red again, a greater vitality becomes apparent, and many nervous symptoms disappear, under the influence of this agent. On the other hand, sores become more inflamed. In a case of croup, in which the patient, a child, had undergone the operation of tracheotomy, a large blister, covered with diphtheric membranes, was cleansed by the action of oxygen; but, a week later, this agent had to be discontinued, the blister having become inflamed. The child recovered. Our authors state that the action of oxygen is rapid, that they have never administered longer than for thirty or forty days at a time, and that in most cases it was discontinued at the end of fifteen or twenty days, to be resumed in the course of a few days.

#### Generation of Oxygen.

Mr. ROBINS, the analytical chemist, has just discovered an easy way of obtaining oxygen. It simply consists in heating chromate of potash and peroxide of barium with diluted sulphuric acid. The operation is performed in a common glass retort, at the ordinary temperature. Now that oxygen is becoming a valuable therapeutic agent, this method of obtaining it will be found far preferable to the old one, which consists in heating peroxide of manganese in iron retorts.

#### Therapeutical Application of Electro-Galvanism.

The therapeutic application of electro-galvanism is also attracting considerable attention. In applying a current of electricity to the human frame, the object is to act upon the static electricity in the body. By the application, for instance, of the positive pole, the corresponding electricity contained in the body is set free and circulates in larger quantities in the nerves, the combination of the positive current from the apparatus with the negative in the body forming a neutral compound. An opposite result, of course, follows the application of the negative pole. The normal current circulating in the nerves should be increased when there is a deficiency of electricity in the system, and decreased when there is an excess. In health there exists a certain quantity of electric fluid in the nerves, which is increased or diminished by disease. In those cases which require an increase of electric activity to supply the deficiency of the current in the nerves, the negative electrode must be placed either on the spinal column, the forehead, the temples, or nape of the neck; and the positive applied to the hands, feet, or abdomen, according to the part affected, which it is necessary to bring as much as possible under the direct influence of the electric fluid. In those cases which require the quantity of electricity circulating in the nerves to be diminished, the positive pole must be placed on the back, the negative on the part affected. Chronic affections of long standing, require perseverance in the continued use of the remedy; and there are few cases but which, if they do not absolutely yield to

its influence, at least derive some benefit from it. In general debility, the employment of the electric current is invariably beneficial. It must be applied chiefly to the back when the debility is general, and to, or as near as possible to, the part affected, when it is more local. Dr. FROBIEP has met with great success in treating incontinence of urine with electricity. His plan consists in introducing the electric fluid by one pole into the bladder, whilst the other is applied over the pubes. Electro-galvanic currents have been successfully applied to the bladder, where, from over distension during labor, it has lost the power of expelling its contents, requiring the daily use of the catheter. The electric current speedily restores the organ to the dominion of the will. I will refer again to this subject, in my next letter.

W. N. CÔTE.

## Army and Navy News.

### Appointments.

Dr. F. Minot Weld, of Massachusetts, to be Surgeon, 27th U. S. Colored Troops.  
Dr. J. W. Morgan, of Missouri, to be Ass't Surgeon, 39th U. S. Colored Troops.

### Declined Appointment.

Dr. Gustavus A. Bingel, of Williamsburgh, N. Y., the appointment of Ass't Surgeon of Volunteers.  
Dr. Morris W. Townsend, Surgeon 44th New York Vols., the appointment of Ass't Surgeon of Vols.  
Dr. A. H. Wilson, Acting Ass't Surgeon, U. S. A., the appointment of Ass't Surgeon of Volunteers.  
Dr. L. F. Russell, Acting Ass't Surgeon, U. S. A., the appointment of Ass't Surgeon, U. S. Colored Troops.

### Died.

Ass't Surgeon W. O. Tracey, U. S. Vols., at Nashua, N. H., March 15, 1864.

### Leaves of Absence.

Ass't Surgeon A. E. Carothers, U. S. Vols., for ten days.  
Surgeon W. S. Thompson, U. S. V., for two days.  
Surgeon E. A. Vanderkist, U. S. V., permission to visit Washington, D. C.  
Surgeon John McNulty, U. S. V., for sixty days, for the benefit of his health.  
Surgeon R. B. McCay, U. S. V., for three days.

### Discharges, Dismissals, &c.

Ass't Surgeon Thomas L. Morgan, 10th Missouri Vols., discharged for habitual drunkenness, gross neglect of duty, and absence without leave.  
Ass't Surgeon T. C. Owen, 110th Ohio Vols., honorably discharged, having tendered his resignation on account of physical disability.  
Medical Cadet John E. Beers, U. S. A., honorably discharged to accept an appointment as Acting Ass't Surgeon, U. S. A.  
Medical Cadet Augustus W. Dodge, U. S. A., honorably discharged, to accept a commission as Ass't Surgeon, 4th Maryland Volunteers.  
Surgeon A. Weidenbach, 37th Ohio Volunteers, having failed to appear before a military commission as ordered, is dismissed to date March 8, 1864, for absence without leave.  
Ass't Surgeon Samuel Ingalls, 5th Mass Cavalry, honorably discharged, April 20, 1864, he having tendered his resignation.  
Ass't Surgeon J. B. Thorpe, 9th Ohio Cavalry, upon the representation of the Governor and Surgeon-General of Ohio, is dishonorably dismissed, April 18th, 1864, for habitual drunkenness and neglect of duty.  
Hospital Steward John M. McPherson, U. S. Army, dishonorably discharged for drunkenness and general bad conduct.  
Hospital Steward George A. Smith, U. S. A., dishonorably discharged for forging the signature of his superior officer.

### Orders.

Surgeon Caleb W. Horner, U. S. V., in addition to his present duties, is called as member of the Army Medical Board, for the examination of Ass't Surgeons of Volunteers, now in session at Washington, D. C., to relieve Surgeon M. K. Hogan, U. S. Vols.

Surgeon Hogan, on being relieved, to report to the Commanding General, Army of the Potomac, for assignment to duty.

Surgeon J. M. Lee, U. S. V., is relieved from duty at Wilmington, Del., and will report to the Commanding General, Department of West Virginia.

Surgeon George Suckley, U. S. V., is relieved from Hospital Inspecting Board, and will report to the Commanding General, Middle Department, to resume his duties at Baltimore, Md.

The following Medical Officers will report to the Commanding General, Army of the Cumberland, for assignment to duty:—

Lieut.-Colonel E. D. Kittos, U. S. A., Medical Inspector, Ass't Surgeons J. C. Freeman, A. J. Comfort, H. E. Goodman, J. McCurdy, M. C. Woodworth, S. Kitchen and T. A. McGraw, U. S. Volunteers.

Surgeons C. S. Frink, N. F. Marsh, and Henry Eversman, U. S. V., will report by letter to Ass't Surgeon-General Wood, U. S. A., at Louisville, Ky.

Surgeon James Laing, U. S. V., will report to the Commanding General, Army of the Potomac.

Ass't Surgeon W. S. Woods, U. S. V., will report to the Commanding General, Department of Missouri.

Ass't Surgeon Benjamin McCluer, U. S. V., will report to Ass't Surgeon-General Wood, U. S. A., at Louisville, Ky., for assignment to duty.

Ass't Surgeon Edward Curtis, U. S. A., will report to the Surgeon-General of the Army, for duty in his office.

The following Medical Officers will report to the Commanding General, Army of the Potomac, for assignment to duty:—

Ass't Surgeons J. H. Kinsman and Charles Smart, U. S. A., Ass't Surgeons J. Y. Cantwell, J. B. Hood, W. O. Tracey, J. Collins, F. Wolf, G. A. Bingel, J. S. Radcliffe, L. D. Sheets, A. Van Cleef, A. H. Wilson, and M. W. Townsend, U. S. Vols.

Ass't Surgeon A. E. Carothers, U. S. V., will report to the Commanding General, Department of the Gulf, for assignment to duty in Texas.

Ass't Surgeons A. P. Williams and Alfred Delaney, U. S. V., will report to the Commanding General, Department of Washington, for duty.

Ass't Surgeons J. D. Knight and J. C. Carter, U. S. V., will report to the Commanding General, Department of West Virginia, for duty.

Ass't Surgeon Elliott Cones, U. S. Army, will report to the Commanding General, Department of New Mexico, for duty.

Ass't Surgeon H. Z. Gill, U. S. V., will report to the Commanding General, Northern Department, for duty.

Ass't Surgeon W. F. Buchanan, U. S. A., will report to the Commanding General, Department of the South.

Ass't Surgeon Webster Lindsley, U. S. A., is relieved from duty in the Department of the South, and will report to the Commanding General, Department of Washington, for duty.

### Assignments.

Surgeon J. W. Foye, U. S. V., as Surgeon in Chief, 1st Division, 12th Corps, Army of the Cumberland.

Surgeon W. Threlkeld, U. S. V., as Surgeon in charge General Hospital, Tullahoma, Tenn.

Surgeon H. A. Schlaeflin, U. S. V., to the Marine General Hospital, New Orleans, La.

Surgeon J. B. Morrison, U. S. V., as Surgeon in Chief, Ames Division, Jacksonville, Fla.

Ass't Surgeon R. McGowan, U. S. V., to the Reserve Artillery, Knoxville, Tenn.

Surgeon John L. Teed, U. S. V., to the Cumberland Hospital, Nashville, Tenn.

Ass't Surgeon W. Carroll, U. S. V., as Surgeon in Chief, 2d Brigade, Reserve Artillery, Army of the Potomac.

Surgeon Francis N. Burke, U. S. V., as Health Officer at Memphis, Tenn.

Hospital Steward C. L. Cumming, U. S. A., to the U. S. Laboratory, Philadelphia, Pa.

Hospital Steward E. Alexander, U. S. A., to the General Hospital, Central Park, New York.

Hospital Steward D. S. Bolsinger, U. S. A., to the 5th Regiment U. S. Colored Troops.

Hospital Steward Charles V. Sands, U. S. A., to the 1st Regiment U. S. Colored Troops.

### Miscellaneous.

So much of Special Orders No. 101, current series, from the War Department, as mustered on Surgeon Alexander Shaw, 29th Iowa Vols., is revoked, and he is restored and will resign his regiment for duty, provided the vacancy has not been filled.

So much of Special Orders, No. 142, current series, from the War Department, as dismissed Ass't Surgeon David Scott, 143d Pennsylvania Vols., is revoked, and he is honorably discharged upon tender of resignation.

So much of Special Orders, No. 233, series of 1863, as dishonorably mustered out Assistant Surgeon Washington Burg, 122d Pennsylvania Vols., is revoked upon the recommendation of a military commission and he is honorably discharged.

Contract Physicians on duty in Small Pox Hospitals, have been placed on the same footing, relative to pay as those serving in the field.



## News and Miscellany.

### Homœopathy and Mathematics.

The following calculation was originally published in the *London Medical Circular*. It is hard to conceive how medicines are prepared, having such extreme attenuations as some homœopaths profess to use.

Mr. WHARTON, an able professor of mathematics and astronomy, has had the kindness to answer the difficult questions proposed below.

Q.—If homœopaths give, as they profess to do, the decillionth of a grain of medicine, for a dose, and which decillionth can only be obtained by dissolving the grain of medicine in a decillion drops of some liquid—say alcohol—how long would the grain of medicine last, if the population of the world were a thousand millions, and if there were a thousand millions of such worlds, and if each inhabitant lived for a thousand years, and if they each took a dose per second during their whole existence?

And what must be the dimensions of the vessel that would just hold the decillion drops of alcohol?

A.—The number of generations, each subsisting a thousand years, that the grain of medicine would supply with the homœopathic dose to each individual per second, each generation consisting of the 1,000,000,000 inhabitants of the 1,000,000,000 worlds, is 51,687,535,943,382,425,811,012 156,738,473; and the whole number of years the grain of medicine would last the inhabitants of those worlds, is 31,687,535,943,382,425,811,012,156,738,474  $\times$  1,000, equal to thirty-one thousand six hundred and eighty-seven quintillions, five hundred and thirty-five thousand nine hundred and forty-three quadrillions, three hundred and eighty-two thousand four hundred and twenty-five trillions, eight hundred and eleven thousand and twelve billions, one hundred and fifty-six thousand seven hundred and thirty-eight millions, four hundred and seventy-four thousand years!!!

The time it would take the trillion inhabitants of the thousand millions worlds, each counting 500 years per minute, without intermission, to count the number of years the medicine would last, is 130,494,000 years.

The vessel that would just hold the decillion drops of alcohol must have its length, breadth, and depth, each 229,995,079 096 540 miles long.

Light, traveling 192,500 miles in a second, would require 378 years to travel the length of one of the sides of the cubical vessel that would just hold the decillion homœopathic doses of medicine.

The spherical space which contains the solar system would hold only a very small part of the decillion drops.

The length of the major axis of Neptune's orbit, and consequently the diameter of the sphere, is 5,706,893,200 miles, which light would travel over in eight and a quarter hours.

If the spherical space which bounds the solar system, vast as it is, was increased so as to have its diameter 40,300 times greater, it would be equal in length to a side of the cubical vessel, but would not, of course, hold the decillion drops; for if the sphere was put into the vessel, it would touch it only at five points, or six, if covered, and the angular spaces would be empty.

### A Physician Punished and Fined for Divulging a Patient's Disease.

A Paris physician has been sentenced to imprisonment for one year, fined five hundred francs, and placed under the surveillance of the police for five years, for having divulged the nature of a patient's disease, and thus injured his character. He was also condemned to pay one thousand francs damages to his patient.

### A Female M. D. in England.

For the first time, a lady has this week passed the necessary examination as a medical practitioner. After five years' study, and several repulses in London and Edinburgh, Miss ELIZABETH GARRETT has found a reward for her indomitable perseverance by her name appearing in the list of successful candidates at Apothecaries' Hall. Another examination has yet to be gone through, which, if Miss GARRETT passes, she will be a duly qualified medical practitioner.—*London Paper*, April 8.

### Large Brains.

Three of the largest brains in modern times were those of Drs. CHALMERS and ABERCROMBIE, and Mr. THACKERAY; all of whom died suddenly and alone, in bed.

### MARRIED.

HERING—HAMILTON.—On Tuesday evening, April 19th, by Rev. A. M. Kester, Dr. E. A. Hering, to Miss Frances M. Hamilton, both of Waynesboro, Pa.

LUSK—CHITTENDEN.—On Wednesday, May 4, at the Church of the Pilgrims, Brooklyn, by Rev. Richard S. Storrs, Jr., D. D., Dr. William Thompson Lusk, of New York, and Miss Mary Hartwell Chittenden, daughter of Mr. S. D. Chittenden, of Brooklyn.

PETTIGREW—WOODWORTH.—At the residence of the bride's father, in Fairfax Co., Va., on April 21st, 1864, by Rev. James Ferrie, Mr. Junius B. Pettigrew, Acting Assistant Surgeon, U. S. A., and Miss Harriet Woodworth.

REYNOLDS—VAN BUREN.—On Thursday, April 23, at the residence of the bride's father, by Rev. Dr. Tyng, James B. Reynolds, M. D., and Miss Josephine F., third daughter of M. M. Van Buren, Esq., all of New York.

WOOLVERTON—SIMS.—At Trenton, N. J., April 27th, 1864, by Rev. J. H. Callen, Dr. Joseph W. Woolverton, late Surgeon to 30th Regiment, N. J. Vols., and Miss Anna Maria Sims, both of that city.

WARD—KOST.—At Adrian, Michigan, April 20th, at the residence of Prof. Kost, M. D., by President Asa Mahan, Captain William H. Ward, of the 47th Ohio Infantry, to Miss Mattie J. Kost.

### DIED.

FITZPATRICK.—In Washington, D. C., May 6th, James W. Fitzpatrick, M. D., of New York, Assistant Surgeon, U. S. A., on duty at Havewood Hospital.

GRAY.—In the Borough of Chester, Pa., on the afternoon of the 8th instant, Dr. William Gray, in the 69th year of his age.

HENDERSON.—On the 1st instant, aged two years and nine months, Robley Duglison Henderson, youngest son of Dr. A. A. Henderson, U. S. Navy.

JOHNSON.—On the 5th instant, Ada Gracien, aged 8 months, only child of Augusta and Dr. W. K. Johnson, U. S. Navy.

ROSSITER.—On the 22d ult., at the house of a relative, in Washington, D. C., Dr. Joseph P. Rossiter, son of Lindsey Rossiter, Esq., of Morristown, in the 33d year of his age. The deceased was among the first to offer himself to serve professionally in the service of his country. He was passed among the 18th of his class by the Board of Examiners for the service, and was early appointed a regimental surgeon, in which position he served with distinguished ability. Thus is another sacrifice made on the altar of our country.

SHERMAN.—On the 4th instant, Washington Sherman, Surgeon, U. S. Navy.

### OBITUARIES.

#### Dr. Milton Mitchell.

Dr. Milton Mitchell died at the residence of his father, Dr. George F. Mitchell, in Mansfield, Ohio, April 7th, 1864, in the 29th year of his age.

At a meeting of the Physicians of Mansfield, at which, Dr. W. Bushnell was appointed President, and Dr. A. Sutherland, Secretary, the following proceedings were adopted, on the occasion of the death of Milton Mitchell, M. D.

He was born in this County, June 5th, 1835. From his early youth he manifested great interest in scientific and literary pursuits. At the age of 14 years, he entered College at the Ohio Wesleyan University, and graduated in the classical course of that institution at the age of 18, with marked honor.

He then commenced the study of medicine with his father, Dr. G. F. Mitchell, and graduated at Miami Medical College, Cincinnati, at the age of 21.

Some time afterward he received also, a degree from the Ohio Medical College.

A few months after graduation, he was appointed Assistant Physician to the Central Ohio Lunatic Asylum, at Columbus, the duties of which he discharged with great credit to himself and profit to the suffering inmates.

His attention to business, his love of study, both professional and literary, involved more labor than his physical constitution could endure, and this in addition to the loss of healthful exercise in the open air, gradually reduced his vital energies until within less than one year from the time he entered the Asylum, he was attacked with severe Hemorrhage of the Lungs.

A brilliant intellect combined with rare attainment and great energy he promised fair to stand out among the first men of the profession. Affable and genial in his manners, he endeared to himself those with whom he associated, and drew around him a crowd of worthy and warm-hearted friends. But the crowning excellence of his character, was his consistent christian course, which commenced at the age of 12 years, when he united with the M. E. Church, of which he continued to be a zealous member up to the time of his death.

During the latter part of his illness he was confined to his room, and unable to speak aloud. But many an eloquent, though whispered appeal did he make in favor of that power that sustained him, and gave even joy and happiness, amid all his afflictions. His appeals and admonitions were not made in vain.

As he neared the closing scene he fixed his eyes intently as though he caught a glimpse of the future state, and with a smile and a gentle whisper, he pronounced the word Heaven! Heaven, and as he died upon his lips he breathed his last, and his spirit was in the enjoyment of that rest that was the subject of his thoughts. Who would not die thus?

In view of the foregoing we submit for adoption the following resolutions:

*Resolved*, That in the death of Dr. Milton Mitchell, the profession has lost a worthy and promising member, society a bright ornament, and his family a model son and brother.

*Resolved*, That we deeply sympathize with the bereaved relatives in their irreparable loss.

*Resolved*, That we will attend his funeral in a body wearing the usual badge.

*Resolved*, That a copy of this sketch and resolutions be forwarded to the family, and that they be published.

J. Y. CANTWELL,  
A. SPHERLAND,  
S. STEWART.

### Dr. John Ware.

Dr. John Ware died suddenly at his residence, in Boston, on Friday, April 29th, at the age of 65 years. He was the son of Rev. Henry and Mary (Clarke) Ware, and was born in Hingham, Massachusetts, 19th December, 1795. His father was, for several years, minister in Hingham, and was afterward Hollis Professor of Theology in Cambridge. His mother was daughter of Rev. Jonas Clarke, of Lexington, and granddaughter of Rev. Thomas Hancock, who was grandfather of the celebrated John Hancock. He graduated with high honors at Harvard College in 1813. Immediately after leaving college he began the study of medicine, and received his degree of M. D., in 1816, when he began the practice of his profession in Duxbury, but in 1817 he removed to Boston, where he resided the remainder of his life. He soon acquired an extensive practice, and attained to the highest rank in professional skill. In 1832 he was appointed Professor of the Theory and Practice of Medicine in the Medical Department of Harvard College, and held this office until 1838. He published various medical lectures and discourses, essays on "Croup," on "Delirium Tremens," and on "Hæmoptysis," a volume on the "Philosophy of Natural History," and a "Memoir of Henry Ware, Jr." (Boston, 1846.)

He was for several years, President of the Massachusetts Medical Society, and a meeting of the Society was held on Saturday evening, at which a series of resolutions were passed expressive of the loss to the Society and to the medical profession by his death. He was also a member of the American Academy of Arts and Sciences.

At a meeting of the Suffolk District Medical Society, held April 30th, remarks commemorative of the deceased were made by Drs. JACOB BIGELOW and JOHN HOMAKS. The following resolutions were unanimously adopted:

*Resolved*, That in the death of Dr. John Ware, the Society has lost a learned and beloved member, who for more than forty years assiduously and successfully devoted himself to the practice of his profession, and by public teaching to the advancement of medical science.

*Resolved*, That his modest and urbane manners, his purity of life and his unflinching integrity have won the esteem and love of all who knew him, and have engraved on our hearts the model of a Christian gentleman.

*Resolved*, That a copy of the above be published by the Secretary and presented to his afflicted family.

### METEOROLOGY.

	April	25.	26.	27.	28.	29.	30.	M. I.
Wind.....	S.	N. W.	W.	N. W.	N.	N. W.	N. W.	
Weather.....	Cl'dy. Rain.	Clear.	Cl'dy. Sh'er.	Clear, High Wind.	Clear.	Cl'dy. Sh'er.	Clear.	
Depth Rain....	6-10		1-10			1-10		
Thermometer Minimum.....	52°	46°	45°	32°	35°	37°	44°	
At 8 A. M.....	60	54	58	41	45	52	57	
At 12 M.....	63	62	64	50	56	63	69	
At 3 P. M.....	63	59	65	47	55	65	62	
Mean.....	59.2	55.1	58.0	42.2	47.3	53.3	53.3	
Barometer. At 12 M.....	29.9	29.9	29.5	30.0	30.2	30.1	29.9	

Germantown, Pa.

B. J. LEEDOM.

### MORTALITY.

	Philadelphia. Week ending April 30.	New York. Week ending May 2.	Baltimore. Week ending May 2.	Boston. Week ending April 30.	Providence. Month of March.
Pop'l'n. (estimated.)	620,000	1,000,000	240,000	180,000	52,000
Mortality.					
Male.....	191	241	65	53	44
Female.....	158	217	48	50	54
Adults.....	137	220	43	58	59
Under 15 years.....	169	233	69	67	35
Under 2 years.....	90	131	32	43*	12
Total.....	332	458	108	103	95
Deaths in 100,000.....	53.54	45.80	45.00	57.22	182.49
American.....	272	292	...	84	75
Foreign.....	61	166	...	19	17
Negro.....	31	20	19	3	10
ZYMOTIC DISEASES.					
Cholera, Asiatic.....	...	2	...	...	...
Cholera Infantum.....	...	1	...	...	...
Cholera Morbus.....	...	...	...	...	...
Croup.....	5	24	11	7	3
Diphtheria.....	6	12	5	4	7
Dysentery.....	...	1	...	...	...
Erysipelas.....	8	9	1	1	...
Fever, Intermittent.....	...	...	...	...	...
Fever, Remittent.....	1	2	...	...	...
Fever, Scarlet.....	6	21	3	6	8
Fever, Typhoid.....	15	14	6	1	8
Fever, Typhus.....	14	24	...	...	1
Fever, Yellow.....	...	...	...	...	...
Hooping-cough.....	1	4	2	...	...
Infuenza.....	...	...	...	...	...
Measles.....	3	9	7	...	...
Small Pox.....	6	5	7	4	...
Syphilis.....	...	...	...	...	...
Thrush.....	...	...	...	...	...
SPORADIC DISEASES					
Albuminuria.....	1	4	...	...	...
Apoplexy.....	6	8	...	...	...
Consumption.....	39	57	15	13	21
Convulsions.....	22	23	4	1	2
Dropsy.....	13	24	4	3	...
Gun-shot Wounds.....	1	...	...	...	...
Intemperance.....	4	6	3	...	2
Marasmus.....	9	14	...	3	...
Pleurisy.....	...	...	...	1	...
Pneumonia.....	22	53	2	8	9
Puerperal Fever.....	3	1	...	...	...
Scrofula.....	1	...	...	...	...
Violence and Acc'ts.....	22	17	6	7	8

\* Under 5 years.

### NOTICE.

#### American Medical Association.

The Fifteenth Annual Meeting of the "American Medical Association," will be held in the City of New York, commencing Tuesday, June 7th, 1864, at 10 o'clock, A. M.

Proprietors of medical journals throughout the United States and their Territories are respectfully requested to insert the above notice in their issues.

GUIDO FURMAN, M. D.,

126 West 25th St., N. Y.

Secretary.